

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1. (Currently Amended) A tunable, switchable electromagnetic filter comprising:
an electromagnetic resonator having a first end and a second end;
a switch coupled to the second end of the resonator and to ground;
an impedance element coupled to the first end of the resonator, wherein the resonator, the switch and the impedance element comprise a switchable filter;
a ferroelectric tunable component electromagnetically coupled to the switchable filter;
a tuning control signal generator for generating a tuning signal, coupled to the ferroelectric tunable component;
a switching control signal generator for generating a switching signal, coupled to the switch.
2. (Original) The filter of claim 1, further comprising a microelectrical mechanical switch.
3. (Original) The filter of claim 1, further comprising a voltage source coupled to the component.
4. (Original) The filter of claim 1, further comprising a ferroelectric capacitor.
5. (Original) The filter of claim 1, further comprising a voltage source coupled to the switch.

6. (Original) The filter of claim 1, further comprising a ferroelectric capacitor having a quality factor at about 1.9 GHz equal to about 50 or greater.
7. (Original) The filter of claim 1, further comprising a second resonator coupled to the first resonator and wherein the impedance element is coupled between the first and second resonators.
8. (Original) The filter of claim 7, further comprising:
an input capacitor coupled at a first end of the input capacitor to an input port of the filter and at a second end of the output capacitor to the impedance element and the first resonator; and
an output capacitor coupled at a first end of the output capacitor to an output port of the filter and at a second end of the output capacitor to the impedance element and the second resonator.
9. (Original) The filter of claim 8, further comprising a second tunable ferroelectric component coupled to the filter.
10. (Original) The filter of claim 9, wherein the impedance element, the input capacitor and the output capacitor comprise, respectively, a third, a fourth and a fifth tunable ferroelectric component.
11. (Original) The filter of claim 7, wherein the first and second resonators comprise monoblock resonators.
12. (Original) The filter of claim 1, wherein the filter resonates at a frequency between about 1850 MHz and about 1910 MHz.
13. (Original) The filter of claim 1, wherein the filter resonates at a frequency between about 1930 MHz and about 1990 MHz.

14. (Original) The filter of claim 1, wherein the filter resonates at a frequency between about 824 MHz and about 849 MHz.
15. (Original) The filter of claim 1, wherein the filter resonates at a frequency between about 869 MHz and about 894 MHz.
16. (Original) The filter of claim 1, wherein the filter resonates in a half wave mode.
17. (Original) The filter of claim 1, wherein the filter resonates in a quarter wave mode.
18. (Cancelled).
19. (New) A tunable, switchable electromagnetic filter comprising:
 - an electromagnetic resonator;
 - a first switch coupled to the resonator and to ground;
 - an impedance element coupled to the resonator, wherein the resonator, the first switch and the impedance element comprise a switchable filter;
 - a ferroelectric tunable component electromagnetically coupled to the switchable filter;
 - a second switch electromagnetically coupled to the ferroelectric tunable component and to a ferroelectric component, switchable between a first configuration wherein the ferroelectric component is coupled to the ferroelectric tunable component, and a second configuration wherein the ferroelectric component is not coupled to the ferroelectric tunable component;
 - a tuning control signal generator for generating a tuning signal, coupled to the ferroelectric tunable component;
 - a switching control signal generator for generating a first switching signal, coupled to the first switch; and
 - a second switching control signal generator for generating a second switching signal coupled to the second switch.

20. (New) The filter of claim 19, further comprising a second ferroelectric component electromagnetically coupled to the second switch wherein the second ferroelectric component is coupled to the ferroelectric tunable component in the second configuration.